

## **REMARKS / DISCUSSION OF ISSUES**

Claims 1-5, 7-15 and 17-20 are pending in the application upon entry of this amendment. Claims 1 and 15 are the independent claims. Claims 19 and 20 are new and include subject matter set forth in the filed application.

Applicant gratefully acknowledges the indication of approval of the drawing corrections submitted on March 8, 2004. Formal drawings including the changes were filed on May 6, 2005.

### **Allowable Subject Matter**

Applicant gratefully acknowledges the indication of allowability of the subject matter of claims 6-10, 14 and 18.

### **Rejections under 35 U.S.C. § 102**

Claims 1-5, 11 and 13 were rejected under 35 U.S.C. § 102(e) as being unpatentable over *Ueyama* (U.S. Patent 6,078,44). For at least the reasons set forth below, it is respectfully submitted that the rejected claims are patentable over the applied art.

A proper rejection for anticipation requires, as the first step in the inquiry, that all the elements of the claimed invention be described in a single reference. A necessary corollary to the test of anticipation is that the absence from the reference of any claimed element negates anticipation.

Independent claim 1 is drawn to an optomechanical system, and features: *"...a lid attached to a housing and adapted to apply a downward force upon the first set of curved surfaces, the sphere, and the second set of curved surfaces..."*

In a specific embodiment shown in Figs. 2B and 2C of the filed application, a lid 211 applies a downward force that is transferred to the first set of curved surfaces, shown in the specific embodiment as the sphere and the second set of curved surfaces. The force of the lid maintains the integrity of the system.

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By contrast, the reference to *Ueyama* lacks at least the disclosure of the lid attached to the housing as recited in claim 1. Notably, the Office Action recognizes the absence of this feature of the claim. (See page 5 of the Office Action.) Applicant concurs that the reference to *Ueyama* lacks, *inter alia*, the disclosure of the lid featured in claim 1. The reference to *Ueyama* discloses driving mechanisms 30, 40, which include piezoelectric actuators, 31, 41, respectively. The driving mechanisms are disposed in recesses 25 formed at the top and sides on the concave spherical surface 28 of the space 24. The driving mechanisms 30, 40 move the pickup unit 10, which is pressed by friction members 32,42, respectively. From a review of the reference to *Ueyama* it is clear that the mechanisms and constituent parts of the mechanisms 30,40 are in no way the lid featured in claim 1. As such, *Ueyama* lacks the disclosure of the lid as recited in claim 1. (See column 4, line 198-column 5, line 18; and column 6, line 22-column 7, line 16 of the reference to *Ueyama*.)

Because the reference to *Ueyama* lacks the disclosure of at least one of the features of claim 1, it cannot serve to establish a *prima facie* case of anticipation thereof. Therefore, claim 1 and the claims that depend therefrom are patentable over the applied art. Allowance is solicited.

### **Rejections under 35 U.S.C. § 103**

1. Claim 12 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Ueyama* in view of *Baker, et al.* (U.S. Patent 4,552,024).

Claim 12 depends ultimately from claim 1, which for at least the reasons set forth above is patentable over the applied art. Therefore, it is respectfully submitted that claim 12 is patentable over the applied art at least because of its dependence on claim 1.

The above notwithstanding, the rejection of claim 12 is improper because *Baker, et al.* qualifies as non-analogous art and thus cannot serve to establish a rejection under 35 U.S.C. § 103(a). To qualify as analogous art, a reference must be within the inventor's field of endeavor or must be reasonably pertinent to the specific problem with which the inventor was involved.

The reference to *Baker, et al.* relates to a method and apparatus for directly testing the strength of a prism shaped cutting tool bit. This field of endeavor is outside the field of optomechanical systems, which is the subject of claim 12. Furthermore, the reference discloses a series of constrained members 11, 12, 13 butted together to make a tangential point contact with member 18, which is being tested. The members 11-13 support and constrain the member 18. While the members 11-13 are polished metal ball bearings, the polishing fosters dimensional accuracy. (See column 2, line 54-column 4, line 2 of the reference to *Baker, et al.*)

By contrast, claim 12 features *curved surfaces have finishes that permit smooth rotation of the sphere in response to forces applied via the alignment tool while the curved surfaces apply forces required for holding the sphere in alignment during normal use.* As such, claim 12 is directed to providing curved surfaces that permit smooth rotation of the sphere when an alignment tool is needed. The reference to *Baker, et al.* discloses use of members 11-13 to accurately position an element under test. Therefore, it is respectfully submitted that the disclosure of *Baker, et al.* is not reasonably pertinent to the specific problem that the invention of claim 12 addresses.

For at least the reasons set forth above, it is respectfully submitted that for at least the reasons set forth above, the application of *Baker, et al.* in rejecting claim 12 is improper. Because a proper *prima facie* case of obviousness has not been established, it is respectfully requested that the rejection of claim 12 be withdrawn and that claim 12 be allowed.

2. Claims 15 and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Chuang* (U.S. Patent 5,800,311). For at least the reasons that follow, it is respectfully submitted that claims 15 and 17 are patentable over the applied art.

Applicant respectfully submits that the reference to *Chuang* also qualifies as non-analogous art. *Chuang* relates to a wrist exerciser, which is outside the realm of the optomechanical system of claims 15 and 17. Furthermore, claim 15

addresses the securing of the sphere 105 with a plurality of magnets. Contrastingly, *Chuang* incorporates magnets 34 in cooperation with coils 53 to provide current to lighting elements indicating the movement of a rotator during exercise. Therefore, *Chuang* is not reasonably pertinent to the specific problem that the invention of claim 15 addresses. (See column 4, lines 16-54 of the reference to *Chuang*.)

For at least the reasons set forth above, it is respectfully submitted that *Chuang* is non-analogous art and the rejection of claim 15 based thereon is improper. Additionally, the rejection of claim 17, which depends from claim 15 is similarly improper. It is respectfully requested that the rejection of claims 15 and 17 be withdrawn and that claims 15 and 17 be allowed.

### **Conclusion**

In view of the foregoing, Applicant respectfully requests that the objections and rejections of record be withdrawn, and all pending claims be allowed. If any remaining issues can be resolved through a personal or telephonic interview, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted on behalf of:  
Agilent Technologies, Inc.

A handwritten signature in black ink, appearing to read 'Will S. Francos', written over a horizontal line.

by: William S. Francos (Reg. No. 38,456)

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